

BRUHAT BANGALORE MAHANAGARA PALIKE

Name of work: Maintainance of RO Plants
constructed in ward 07, Byatarayanapura

[Pick the date]

Estimate cost: 25.00 lakhs

Ward 7 byatarayanapura

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK : Maintenance of RO plants constructed in ward 07 byatarayanapura

Estimation Cost.Rs

95.00 lakhs
8451.00

Sl.no	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate	Amount
1	Geophysical Investigation of site for sinking Borewell Geophysical Investigation of site for sinking Borewell for supplying drinking water to the habitation either through a hand pump, Mini Water Supply scheme, or Piped Water Supply Scheme by vertical electrical sounding by adopting venner or Schlumberger's method, including reconnaissance survey of geological formation, geophysical investigation of existing ground water in the vicinity, its quality, quantity & acceptability of the users indicating the location of site, recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth of 1.0 metre in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site, engaging technical personal and labour required etc., complete and as per the directions of the Engineer-in-charge of the work. (P.No - 148, I.No-13.04,RWS 19-20 SR)	Each BW	1				1	3881.04	3882.00
	Basic Rate	3768.00							
	3% Area Weightage	113.04							
	Total	3881.04							
2	Sinking of Borewell of 165mm dia clear using super fast hydraulic rig of capacity 300 PSIG & above 1100 CMF & above in all strata including over burdern. Fixing of casing pipes, collars and cap with necessary cutting, threading and welding including transportation of rig and supporting vehicle, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (Excluding cost of casing pipes, collars, cap etc., complete), complete and as per the directions of the Engineer-in-charge of the work . (P.No - 148, I.No-13.01,RWS 19-20 SR)								
	0-50mtrs	Rmtr	1	50.00			50.00	357.41	17871.00
	Basic Rate	347							
	3% Area Weightage	10.41							
	Total	357.41							
2a	50-100mtrs	Rmtr	1	50.00			50.00	455.26	22763.00
	Basic Rate	442							
	3% Area Weightage	13.26							
	Total	455.26							
2b	100-150mtrs	Rmtr	1	50.00			50.00	469.68	23484.00
	Basic Rate	456							
	3% Area Weightage	13.68							
	Total	469.68							
2c	150-200mtrs	Rmtr	1	50.00			50.00	552.08	27604.00
	Basic Rate	536							
	3% Area Weightage	16.08							
	Total	552.08							
2d	200-250mtrs	Rmtr	1	50.00			50.00	653.02	32651.00
	Basic Rate	634							
	3% Area Weightage	19.02							
	Total	653.02							
2e	250-300mtrs	Rmtr	1	50.00			50.00	721.00	36050.00
	Basic Rate	700.00							
	3% Area Weightage	21.00							
	Total	721.00							

Sl.no	Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				(m)	(m)	(m)			
3	Supply of ISI Mark nominal bore, plain end steel casing pipe-grade of steel Fe 410 of wall thickness conforming to IS 4270-2001 and latest amendments, electrical resistance welded steel tube material and conforming to IS 1387- 1993 and manufactured by basic open hearth electric or basic oxygen process in random length of 5 to 7m. Both ends threaded conforming to IS 554-1985, one end fixed with socket conforming to IS 4270-2001 and the other end with screwed pipes. All pipes shall be reasonably free from defects. The tubes shall be reasonably straight and should be with ISI marking weighing 25.10kg/m. (exclusive of all taxes and duties). Prices include Collar-Medium duty 175mm dia x 5.4mm thick - Rs 950.00 complete and as per the directions of the Engineer-in-charge of the work. (P.No-338, SI.No-15.85,RWS 19-20 SR)								
	Rmtr	✓	1	60.00			60.00	1364.75	81885.00
	Basic Rate		1325						
	3% Area Weightage		39.75						
	Total		1364.75						
4	PVC Pipes 10kg/sqm 250mm outerdia(PWD SR 2018-19 XXXV/892 Code 3008)								
	m	✓	1	10.00			10.00	2203.39	22034.00
5	Providing and laying at site of work MS casing caps as per IS 1239 (part-II) 1982 with all latest amendments if any for any dia. The thickness of plate used for covering one end shall be 3mm (minimum). The dimensions of caps and colars shall be strictly as per IS 1239 (Part-II) 1982 with all amendments including cost of material and labour charges for fixing, if any etc. complete with all lead and lifts and as directed by the Engineer in charge(P.No-338,SI.No-15.87,RWS 19-20 SR)								
	Each	✓	1				1	103.00	103.00
	Basic Rate		100.00						
	3% Area Weightage		3.00						
	Total		103.00						
6	Fabrication supplying and mounting MS box of 16 SWG suitable for floor /wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primer paint and finally finished with approved colour enamelled metal paint etc., complete box of 21600 sqcm with all lead and lift, loading unloading and labour charges etc., complete and as per the directions of the Engineer-in-charge of the work (P.No-30,I No-5.42.KPWD Electrical SR 19-20)								
	Sq.cm	✓	1	1000	20		20000	0.35	7000.00
7	Supply and delivery at site wrought middle steel (galvanized) 50 mm dia GI union confirming to IS 1239-II, 1991 with latest amendments if any. (RDWS SR 2019-20 C-15/P-258 I. No. 15.78.5)								
	No	✓	1	1			1	180.25	181.00
	Basic Rate		175.00						
	3% Area Weightage		5.25						
	Total		180.25						
8	Supply and delivery at site wrought middle steel (galvanized) 50 mm dia GI hexagonal nipple confirming to IS 1239-II, 1991 with latest amendments if any. (RDWS SR 2019-20 C-15/P-258 I. No. 15.80.5)								
	No	✓	1	3			3	144.20	433.00
	Basic Rate		140.00						
	3% Area Weightage		4.20						
	Total		144.20						
9	Supply and delivery at site wrought middle steel (galvanized) 50 mm dia GI elbow confirming to IS 1239-II, 1991 with latest amendments if any.(RDWS SR 2019-20 C-15/P-257 I. No. 15.73.5)								
	No	✓	1	3			3	180.25	541.00
	Basic Rate		175.00						
	3% Area Weightage		5.25						
	Total		180.25						
10	Labour charges for Erection, Electrification and commissioning works of Pump sets including aligning and balancing with all necessary erection of materials and labour including supply and erection of two pair of supporting clamps, bore well caps, cable clips and water tight gland cable protectors, bolts, nuts, valve and gauges, tools and equipments etc., involved in the job, as per specifications, with testing of as per instructions of engineer incharge of work(P.No - 130, I No- 2.16,RWS 19-20 SR)								
	Job	✓	1					5819.50	5820.00
	Basic Rate		5650						

Sl.no	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate	Amount
	3% Area Weightage	169.5							
	Total	5819.5							
11	Labour charges for Erection of outdoor type panel board and meter board units with all necessary materials and labour tools and equipments including providing cement concrete foundation bed etc., complete, as per specifications, with testing of as per instructions of engineer incharge of work(P.No - 131, I.No-12.18,RWS 19-20 SR)								
		Job	1				1	1233.94	1234.00
	Basic Rate	1198							
	3% Area Weightage	35.94							
	Total	1233.94							
12	Supplying of 1.1KV LT UG cable XPLE or heat resistant PVC Insulated PVC extruded inner sheath armoured UG LT cable as per IS -1554(Part-1) or IS-7098 Part-1,Armouring strip thickness in average +5% and resistivity 14ohms/kms(max) as per IS -3975 4 core 16sqmm (Ele SR 2019-20 P-No 40 I/No-6.4.4)								
		Rmtr	1	30.00			30.00	150.00	4500.00
13	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe/ stone pipe / on wall/ on pole as required 6 sqmm to 16 sqmm. (Ele SR OF 2019-20 P-No 41 I/No-6.5.1)								
		Rmtr	1	30.00			30.00	11.88	357.00
14	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc. complete cutting road surfaces(P.No - 41, I.No -6.6.3, KPWD Electrical SR 19-20)								
		Mtr	1	30.00			30.00	82.00	2460.00
15	Supplying and fixing of class A GI pipe on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class 40mm (P.No - 41, I.No -6.9.1, KPWD Electrical SR 19-20)								
		Mtr	1	4.00			4.00	335.00	1340.00
16	Earthing: Supplying and fixing and wiring earth electrode for grounding circuits IC cutouts and other equipments on the meter board in the pit. The pits should be filled up with equal proportion of salt and charcoal 150mm around the pipe to complete depth. The connection from the pipe to the conduits etc is to established through GI wire of sizes as per clause 7.3.3 of IS 732 using 12mm bolts, nuts, washers and check nuts, the pipe shall have 16 through holes of 12mm dia (P.No - 131, I.No-12.23,RWS 19-20 SR)								
		Nos	1				1	3741.99	3742.00
	Basic Rate	3633							
	3% Area Weightage	108.99							
	Total	3741.99							
17	Providing, Supplying and fixing LT cast iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc.with all necessary materials and labour tools and equipments, as per specifications, with testing of as per instructions of engineer incharge of work a) 3½x6 Sqmm (P.No - 131, I.No-12.22(a),RWS 19-20 SR)								
		Nos	1				1	511.94	512.00
	Basic Rate	497							
	3% Area Weightage	14.91							
	Total	511.91							
18	Supplying and fixing of polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc. Size 20 x 20 x 2.5 inches with all lead and lift, loading, unloading and labour charges etc., complete and as per the directions of the Engineer-in-charge of the work(P.No - 24, I.No -5.6.6, KPWD Electrical SR 19-20)								
		Nos	1				1	292.00	292.00
19	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia. bore well comprising of single stage or multistage CF pump close coupled by means of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for operation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required accessories such as suction, casing suction strainers sand guard Non return valve etc. complete. The pump and motor shall form an integral unit with all the required fittings 20 HP 40 Stage(PWD SR 18-19, P.No XLII SI.no.60)								
		Nos	1				1	90595	90595.00

Sl.no	Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				(m)	(m)	(m)			
20	Supply and delivery of galvanized mild steel tubes of 6 mtr standard length heavy class (C Class) as per IS 1239 (Part-I) 1990 with latest amendments with ISI Mark (one end fitted with heavy duty collar and other end fitted with protective cover) (50mm) (P.No - 130, I.No-12.11(a),RWS 19-20 SR)								
	Rmtr	1	59.00				59.00	2861.34	168820.00
	Basic Rate	2778							
	3% Area Weightage	83.34							
	Total	2861.34							
21	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 complete and as per the directions of the Engineer-in-charge of the work(P.No - 7, I.No -2 6 4, KPWD Electrical SR 19-20)								
	Mtr	1	600.00				600.00	205.00	123000.00
22	Supplying & delivery at site brand new / Essen / lotus sunsines/Adarsh/Gk controls best indigenous make combine energy meter-cum-control panel board unit of size 1200 x 600 x 300 mm minimum mechanically strong and vermin and water proof the unit shall have two detachable doors suitable for operation on 3ph,50Hz, 380/440 volts. AC supply with spring loaded latch locking with a key ribs should be provided inside the door canopy apron and louvers ventilators shall be provided the combine energy mtr cum control panel board unit suitable for operation on 3ph, 50Hz,380/440 AC supply shall be consisted etc., completed T panel board shall be fabricated on single unit in the above components panel board for suitable pumpset above components panel board for suitable pumpset above Up to 20HP with star delta starter (MR) Page No XLVII. SI No.13, PWD SR 2018-19								
	Nos	1					1.00	21000.00	21000.00
23	Supply and delivery at site of brand new best make gate valve as per IS 778/1984 with ISI Mark and as per its latest amendments a)size 50mm (P.No - 128, I.No-12.05(a),RWS 19-20 SR)								
	Each	1					1	1225.70	1226.00
	Basic Rate	1190							
	3% Area Weightage	35.7							
	Total	1225.7							
24	Supply and delivery at site of brand new best make non-return valve as per IS 778/1984 with ISI Mark and as per its latest amendments a)size 50mm (P.No - 129, I.No-12.06(a),RWS 19-20 SR)								
	Each	1					1.00	1210.25	1211.00
	Basic Rate	1175							
	3% Area Weightage	35.25							
	Total	1210.25							
25	Supply and delivery at site delivery of best indigenous brand new MCB (Miniature Circuit Breakers) of required capacity as per IS 88228/1978 and its latest amendments and with ISI Mark of 6/10/16/20/25/40 Amps with scalable box. (P.No - 130, I.No-12.10,RWS 19-20 SR)								
	Each	1					1.00	1055.75	1056.00
	Basic Rate	1025							
	3% Area Weightage	30.75							
	Total	1055.75							
26	Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in Ordinary soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specifications(P.No - 6, I.No - 2.3, PWD SR 18-19)								
	For Connecting borewell	Cum	1	510.00	0.45	0.6	137.70		
	Sub total						137.70	316.94	43643.00
	Basic Rate	299							
	6% Area Weightage	17.94							
	Total	316.94							

Sl.no	Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				(m)	(m)	(m)			
27	Providing and installing at site of work 63mm (0.662) PVC Pipes of 6kg / cm2 including cost of pipes and specials and labour, including lowering into trenches, laying true to line, level and perfect linking at joints leak proof including joining of approved type with all labour and lift charges, handling charges including encasing the pipe alround to a depth not less than 15cms with gravel or selected earth available from the excavation etc. , complete (P No - 89, SI No - 10.01 2.RWS 19-20)								
	For Connecting borewell	Mtr	1	510.00			510.00		
	Sub total						510.00	126.69	64612.00
	Basic Rate	123							
	3% Area Weightage	3.69							
	Total	126.69							
28	Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m and lift upto 1.5m including cost of all labour complete as per specifications (P.No - 7, I.No - 2.11, PWD SR 18-19)								
	For Connecting borewell	Cum	1	510.00	0.45	0.6	137.70		
	Sub total						137.70	128.26	17662.00
	Basic Rate	121							
	6% Area Weightage	7.26							
	Total	128.26							
29	Cutting of road surface for pipeline trenches and disposing of the excavated stuff as directed including barricading, danger lighting etc. in the following classification. (RDWS SR 2019-20 Pg No.08 I No 2.26) Cutting Asphalt Road Surface(RDWS SR 2019-20Pg No.08 I No 2.26.2)								
		Cum	1	510.00	0.45	0.15	34.43	574.52	19778.00
	Basic Rate	542.00							
	6% Area Weightage	32.52							
	Total	574.52							

Sl.no	Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				(m)	(m)	(m)			
30	Earthwork excavation in soil, clay, sand, shedu soil, soft murrum, including shoring, strutting, barricading, danger lighting, bailing out water wherever necessary with stacking the materials as directed upto a lead of 50 Mtr and lift of 1.5 Mtr etc. complete. (RDWS SR 2019-20Pg No.08 I No.11.13)								
	For Water Recharge Pits,	Cum	1	3.14x1.80x1.80/4		3.00	7.63	356.38	2720.00
	Basic Rate	346							
	3% Area Weightage	10.38							
	Total	356.38							
31	Add for additional lift charges for every lift of 1.50 M or part thereof beyond 1.50 Mtr to 10.50 Mtr (RDWS SR 2019-20Pg No.08 I No.11.13.1)								
	For Water Recharge Pits,	Cum	1	3.14x1.80x1.80/4		1.50	3.82	58.71	224.00
	Basic Rate	57.00							
	3% Area Weightage	1.71							
	Total	58.71							
32	Providing and laying in position plain cement concrete of grade M 10 with cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, including cost of all materials, labour, HOM of machinery, curing, lowering to any depth, dewatering etc., complete as per specifications with all lead and lifts for Foundation of steining. (RDWS SR 2019-20Pg No.08 I No.11.17)								
	For Water Recharge Pits,	Cum	1	3.14x1.2	0.15	0.15	0.08	6213.99	527.00
	Basic Rate	6033.00							
	3% Area Weightage	180.99							
	Total	6213.99							
33	100 mm and down nominal size (RDWS SR 2019-20 P No.I item No 23)								
	For Water Recharge Pits,	Cum	1	3.14x1.20x1.20/4		0.60	0.68		
	Total						0.68	1017.25	690.00
	Basic Rate	987.62							
	3% Area Weightage	29.63							
	Total	1017.25							
34	40 mm nominal size stone aggregates ((RDWS SR 2019-20 P No I item No 25)								
	RCC Pits,	Cum	1	3.14x1.20x1.20/4		0.60	0.68		
	Filter media around rings		1	3.14x1.4	0.40	2.70	1.19		
	Total						1.87	1124.17	2097.00
	Basic Rate	1091.43							
	3% Area Weightage	32.74							
	Total	1124.17							
35	20 mm nominal size stone aggregates ((RDWS SR 2019-20 P No I item No 28)								
	RCC Pits,	Cum	1	3.14x1.20x1.20/4		0.60	0.68		
	Total						0.68	1124.17	763.00
	Basic Rate	1091.43							
	3% Area Weightage	32.74							
	Total	1124.17							
36	6 mm nominal size stone aggregates ((RDWS SR 2019-20 P No I item No 31)								
	RCC Pits,	Cum	1	3.14x1.20x1.20/4		0.60	0.68		
	Total						0.68	1124.17	763.00
	Basic Rate	1091.43							
	3% Area Weightage	32.74							
	Total	1124.17							
37	KSRB 2.6: Providing and filling sand (RDWS SR 2019-20 P No II item No 2d 51)								
	RCC Pits,	Cum	1	3.14x1.20x1.20/4		0.50	0.57		
	Total						0.57	1731.38	979.00
	Basic Rate	1680.95							
	3% Area Weightage	50.43							
	Total	1731.38							
38	Supplying & erection of RCC rings for well steining of 0.3 Mtr Depth using M-20 grade concrete using clean graded granite or trap or jelly of approved quality 20mm and down size well compacted including centering, formwork and plastering for both faces with C M 1:3 proportion as per design using 6.50mm M.S. coil at the rate of 10 Kgs/ring including cost of steel and fabrication, bailing out of water, erection etc., complete. For 1.20m dia (clear) rings of steining thickness 0.075mm upto 18 M depth (RDWS SR 2019-20Pg No.08 I No.11.20.3)								
	RCC Pits,	Each	10				10.00		
	Total						10.00	1142.27	11423.00
	Basic Rate	1109.00							
	3% Area Weightage	33.27							
	Total	1142.27							

Sl.no	Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				(m)	(m)	(m)			
39	KSRB 7.9 : Providing and fixing M.S.grill work for windows and ventilators weighing 21kg/sqm using M.S flats, or M.S square rods, or combination of M.S. flats and square rods as per approved design, drawing including cutting steel sections and welding the same to required pattern with a coat of red lead primer, cost of materials, fixtures, labour and HOM complete as per specifications. Specification No.KBS 7 12 (p.g No 34 item No 7.9)								
	RCC Pits,	Kgs	1	3.14x1.20x1.20/4			1.13		
							1.13		
	Total=1.13 x21kg/sqm						23.73	100.70	2390.00
	Basic Rate	95.00							
	6% Area Weightage	5.70							
	Total	100.70							
	BESCOM Charges	Nos	1				1	15000	15000.00
	Total of Other SR Items including GST Unit Rate								15000.00
	Total of PRED 19-20,Electrical SR 19-20,PWD SR 2018-19 Items								871918.00
	Sub Total								886918.00
	Add 12% GST for PRED 19-20,Electrical SR 19-20,PWD SR 2018-19 Items								104631.00
	Total A								991549.00
	Maintainance of Existing Borewells								
	A) Rewinding								
40	Lifting of Submersible pump set as per Specification and direction (P. 94 / I. 12.34.J) RWS SR (2019-20)	Each	25				25.00	1295.00	32375.00
41	Transportation of pumping machineries (P. 94 / I. 12.34.H) RWS SR (2019-20)	Each	25				25.00	1085.00	27125.00
42	Labour charges (over hauling) (P. 94 / I. 12.34.K) RWS SR (2019-20)	Each	25				25.00	3060.00	76500.00
43	A) Repairs to Motor: Rewinding of submersible pump sets with copper insulation wire of suitable gauge as per ISI specification with guarantee of 6 months. P No. 93 / I. No. 12.33) (RWS SR 2019-20)								
	Rewinding of motor of 10.0 HP	Each	0				0.00	4760.00	0.00
44	Rewinding of motor of 12.5 HP above	Each	25				25.00	5320.00	133000.00
	B) Replacement of Motor Parts:								
45	Starter 5 HP (with one year Guarantee) P No. 93 / I No. 12.33.2C RWS SR (2019-20)	Each	25				25.00	5535.00	138375.00
46	Rotor (with one year Guarantee) P No. 93 / I No. 12.33.3C RWS SR (2019-20)	Each	25				25.00	5175.00	129375.00
47	Upper Flange (P No. 93 / I No. 12.33.3D RWS SR (2019-20)	Each	25				25.00	400.00	10000.00
48	Lower Flange (P No. 93 / I No. 12.33.3E RWS SR (2019-20)	Each	25				25.00	400.00	10000.00
49	Upper Housing (P No. 93 / I No. 12.33.3F RWS SR (2019-20)	Each	25				25.00	724.00	18100.00
50	Lower Housing (P No. 93 / I No. 12.33.3G RWS SR (2019-20)	Each	25				25.00	724.00	18100.00

Sl.no	Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				(m)	(m)	(m)			
51	Carbon housing Thrust bearing block assembly complete with segment bearing pad & tip carbon/Ferradopadding pad. P. No. 94 / I No.12.34.A RWS SR (2019-20)	Each	25				25.00	1137.00	28425.00
	C) Replacement of pump parts: The following main components of submersible pump sets requiring replacement.								
52	Oil Seal P. No. 93 / I No.12.32.1C RWS SR (2019-20)	Each	25				25.00	171.00	4275.00
53	Oil Seal Steel bush P. No. 152 / I No.12.32.1D RWS SR (2019-20)	Each	25				25.00	171.00	4275.00
54	Guide vane P. No. 93 / I No.12.32.1E RWS SR (2019-20)	Each	240				240.00	450.00	108000.00
55	Impeller Shell moulded with aluminium Bronze) P. No. 93 / I No.12.32.1F RWS SR (2019-20)	Each	240				240.00	682.00	163680.00
56	Discharge outlet (D.O) Bearing D.O Steel Bush P. No. 93 / I No.12.32.1G RWS SR (2019-20)	Each	25				25.00	640.00	16000.00
57	Steel bush (D.O steel bush) P. No. 93 / I No.12.32.1I RWS SR (2019-20)	Each	25				25.00	213.00	5325.00
58	Pump shaft made out of stainless steel Centreless ground with key way (upto 8 stages) P. No. 93 / I No.12.32.1K RWS SR (2019-20)	Each	25				25.00	1281.00	32025.00
59	Non - return valve (NRV) assembly complete with rubber 'O' Ring P. No. 93 / I No.12.32.1N RWS SR (2019-20)	Each	25				25.00	315.00	7875.00
60	Cable Guard P. No. 93 / I No.12.32.1O RWS SR (2019-20)	Each	25				25.00	176.00	4400.00
61	Brass Filter P. No. 93 / I No.12.32.1Q RWS SR (2019-20)	Each	25				25.00	636.00	15900.00
62	Re-erection charges of pumping machineries including overhauling and pointing P. No. 93 / I No.12.34.I RWS SR (2019-20)	Each	25				25.00	1711.00	42775.00
	Other Parts								
63	Providing non-return valve 50 mm Page No. XLVII, SI No. 16, PWD SR 2018-19	Nos							
			12				12.00	1800.00	21600.00

Sl.no	Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				(m)	(m)	(m)			
51	Carbon housing Thrust bearing block assembly complete with segment bearing pad & tip carbon/Ferradopadding pad. P. No. 94 / I No.12.34.A RWS SR (2019-20)	Each	25				25.00	1137.00	28425.00
	C) Replacement of pump parts: The following main components of submersible pump sets requiring replacement.								
52	Oil Seal P. No. 93 / I No.12.32.1C RWS SR (2019-20)	Each	25				25.00	171.00	4275.00
53	Oil Seal Steel bush P. No. 152 / I No.12.32.1D RWS SR (2019-20)	Each	25				25.00	171.00	4275.00
54	Guide vane P. No. 93 / I No.12.32.1E RWS SR (2019-20)	Each	240				240.00	450.00	108000.00
55	Impeller Shell moulded with aluminium Bronze) P. No. 93 / I No.12.32.1F RWS SR (2019-20)	Each	240				240.00	682.00	163680.00
56	Discharge outlet (D.O) Bearing D.O Steel Bush P. No. 93 / I No.12.32.1G RWS SR (2019-20)	Each	25				25.00	640.00	16000.00
57	Steel bush (D.O steel bush) P. No. 93 / I No.12.32.1I RWS SR (2019-20)	Each	25				25.00	213.00	5325.00
58	Pump shaft made out of stainless steel Centreless ground with key way (upto 8 stages) P. No. 93 / I No.12.32.1K RWS SR (2019-20)	Each	25				25.00	1281.00	32025.00
59	Non – return valve (NRV) assembly complete with rubber 'O' Ring P. No. 93 / I No.12.32.1N RWS SR (2019-20)	Each	25				25.00	315.00	7875.00
60	Cable Guard P. No. 93 / I No.12.32.1O RWS SR (2019-20)	Each	25				25.00	176.00	4400.00
61	Brass Filter P. No. 93 / I No.12.32.1Q RWS SR (2019-20)	Each	25				25.00	636.00	15900.00
62	Re-erection charges of pumping machineries including overhauling and pointing P. No. 93 / I No.12.34.I RWS SR (2019-20)	Each	25				25.00	1711.00	42775.00
	Other Parts								
63	Providing non-return valve 50 mm Page No. XLVII, SI No. 16, PWD SR 2018-19	Nos							
			12				12.00	1800.00	21600.00

Sl.no	Description of Item	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				(m)	(m)	(m)			
64	Providing Gate Valve 50 mm Page No. XLVII, SI No. 15, PWD SR 2018-19	Nos							
			12				12.00	1800.00	21600.00
65	Submersible Cable 1x3x6.0 Sq.mm (PWD SR 2018-19 Page No. XLVII SI No. 8)								
		M	5	150.00			750.00	144.00	108000.00
66	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws. P No. 24 / I No. 5.6.6 KPWD Electrical SR 2019-20								
		Each	25				25.00	292.00	7300.00
67	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV. P. No. 41 / I No. 6.9.1 KPWD Electrical SR 2019-20								
	40mm dia GI pipe	Mtr	25	4.00			100.00	335.00	33500.00
68	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc. P. No. 42 / I No. 7.10.2 KPWD Electrical SR 2019-20								
	16Sqmm	No	25				25.00	270.00	6750.00
69	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia. (P No. 40, I No. 6.1) KPWD Electrical SR 2019-20								
		No	6				6.00	2999.70	17998.00
70	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers. P No. 24 / I No. 5.7.2 KPWD Electrical SR 2019-20								
	32 Amps	No	25				25.00	174.00	4350.00
71	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required conforming to IEC 60898. 6-32Amps TPN P No. 27 / I No. 5.17.7 KPWD SR 2019-20								
		No	12				12.00	1715.00	20580.00
72	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete. P.No. 30, I. No. 5.42.2 KPWD Electrical SR 2019-20								
	16SWG	Sq.Cm	4x2	120.00	60.00		115200.00		
			8	360.00	25.00		72000.00		
							187200.00	0.35	65520.00

Sl.no	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate	Amount
	Sub Total								1333103.00
	GST @ 12%								159972.00
Total B									1500000.00
	Total A and B								2491549.00
	Miscellaneous and rounding off								8451.00
	Grand Total								2500000.00

CERTIFICATE:

- 1) The work spot has been inspected and found to be necessary
- 2) The work spot comes under B.B.M.P
- 3) The provisions made in the estimate are necessary and minimum.
- 4) The estimate is based on C.S.R of 2018-2019, PWD Electrical 2019-20, RDWS 2019-20, approved Rate and Issued Rates.

M. P. N. D.
Assistant Engineer
Ward 7

g p
Assistant Executive Engineer
Kodigehalli sub division

g p
ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬೃಹತ್ಯರಾಯನಪುರ ವಿಭಾಗ
ಬೃ.ಬಿ.ಮ.ಪಾ., ಬೆಂಗಳೂರು

Administrative Approval

Accorded For *RS. 25.00 lakhs*
Head of A/C *P-1771*
CER NO *99/21-22 Dt: 14/02/2022*

g p
TA
g p
CE (YNK)

Technical Sanction
Accorded For *RS. 25.00 lakhs*
Head of A/C *P-1771*
CER NO *99/21-22 Dt: 14/02/2022*

g p
TA
g p
CE (YNK)